The Monterey Regional Waste Management District has installed a new $24 million materials recovery facility in Marina. MRF 2.0 will separate wood, metal, concrete and other materials. (Vern Fisher - Monterey Herald)

Marina >> It's big and blue and will eat just about anything.

The Monterey Regional Waste Management District has spent the last year building a $24 million state-of-the-art recycling facility that will open at the end of this month. It’s the only one of its kind on the Central Coast and the public is invited to tour the facility on Saturday.

They call it MRF 2.0 (pronounced Murph two-point-oh), as it is the second version of the publicly-owned Materials Recovery Facility that’s located about two miles north of Marina. Their MRF 1.0 was a simple system that recycled construction and demolition waste, diverting about 2 million tons of it from landfill over the last 20 years.

MRF 2.0 has construction and demolition recycling integrated into a system that handles mixed waste from commercial sources — including food waste from restaurants — as well as curbside recyclables. “It’s uncommon to have (construction and demolition) and curbside recyclables in the same facility, but we think it will prove useful,” said Tim Brownell, Director of Operations at MRWMD. The equipment supplier, Bulk Handling Supplier, is a world-wide provider based in Eugene, Oregon.

Construction and demolition projects are required by state law to divert 65 percent of their waste, and the MRF 2.0 will separate wood, metal, concrete and other materials to help companies meet — or exceed — the requirement.

It will sort and bundle 200 tons of curbside recyclables a day with a 90 percent recovery rate, Brownell said. Previously, blue-binned material from the Monterey Peninsula, with the exception of the city of Monterey, was trucked up to San Jose for processing.

The new facility will help Monterey County reach the state’s goal of recovering 75 percent of its waste. In addition, the facility will help lower greenhouse gas emissions, provide green jobs in the community, and allow local control over what happens to recyclables, according to MRWMD Director of Communications & Sustainability Jeff Lindenthal.
“Most times, people don’t know what happens to their recycling,” he said. “Now we can tell them where it goes, and educate them on the products that use recyclable materials.”

It’s important for consumers to buy products that use such materials, he said, otherwise recycling is not sustainable.

The facility upgrade will allow MRWMD to stay competitive as levels of acceptable contaminants continue to drop, Lindenthal said. China, one of the largest importers of recyclable materials, has lowered its so-called Green Sword by reducing the acceptable contamination level in plastic to 0.5 percent. “Recyclables are traded globally and the revenue allows us to keep costs down,” Lindenthal said. MRWMD will be hiring a broker to handle the commodity.

At MRF 2.0, the curbside recyclables start out in giant mixed mounds on the floor of the receiving room, but end up sorted, baled and stacked neatly. Materials are separated by size and density and sorted using magnets and optical sensors. Three infrared optical sensors identify different kinds of plastics by their resin signatures and are guaranteed to be 95 percent accurate.

Cardboard travels on about 450 feet of conveyors and a plastic water bottle over twice that before it’s binned and baled. It takes about ten minutes for a load of material to run through the conveyors, chutes and bins.

The public is invited to an open house to tour MRF 2.0 on Saturday from 10 a.m. to 2 p.m. There will be educational exhibits, activities for children, and an opportunity to ask questions about recycling. Tours of the new facility will be possible and tour times can be reserved on brownpapertickets.com. More information can be found at mrwmd.org.